

<b>BROOKHAVEN NATIONAL LABORATORY GENERAL CLINICAL RESEARCH CENTER POLICY</b>	GCRC POLICY-20.0	PAGE 1 OF 2
	PREPARED BY: B. Pyatt	Infection Control
SUBJECT: Bioterrorism	REVIEWED BY: W. Gunther	GCRC Manager
	APPROVED BY: G. J. Wang	Medical Dept. Chair
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	REVISION HISTORY: 2	

### **PURPOSE**

This document defines general infection control policies and procedures regarding bioterrorism for the Medical Department.

### **GENERAL**

A national lab may be the initial site of recognition and response to a bioterrorism event. If a bioterrorism event is suspected, local emergency response systems should be activated. Immediate notification should be made to OMC, the Director, Security, local and state health departments, local police, CDC, Emergency Response Services (EMS) and the Infection Control Practitioner.

### **INTERNAL CONTACTS:**

Director:	Sam Aronson, <b>8772</b>
Deputy Director for Operations	Michael Bebon, <b>3434</b> or cell phone <b>631-453-4507</b>
Occupational Medicine Clinic	Joseph Falco <b>3666</b>
Environmental Safety & Health:	Robert Colichio, <b>8440</b> or beeper <b>6114</b> or cell phone <b>631-831-4647</b>
Safeguards & Security Manager:	Len Butera <b>4691</b> <b>EMERGENCY 2222</b>
Pharmacy:	Michael Genua, <b>3589</b>
Plant Engineering	Edward Murphy, <b>3466</b>
Infection Control:	Beatrice Pyatt, <b>3642</b> or beeper <b>5216</b>

### **EXTERNAL CONTACTS:**

Bioterrorism Emergency No. CDC Emergency Response Office: **1-770-488-7100**  
 CDC Hospital Infections Program: **1-404-6396413**  
 CDC Foodborne and Diarrheal Diseases Branch: **1-404-639-2888**  
 Federal Emergency Medical Agency: Donald Wetter, Emergency Coordinator, U.S. Public Health Service: **212-264-2802**  
 HAZMAT: **535-2406**  
 Suffolk County Department of Health: **631-853-3000**  
 New York State Department of Health: **518-474-2011**  
 USAMRIID(U. S. Army Medical Research Institute of Infectious Diseases) Bio-Safety Level (BSL) 3 and 4 Labs with special surge capacity and advanced molecular typing techniques. **1-301-619-2833.**

### **SYMPTOMS OF POSSIBLE BIOTERRORISM AGENTS:**

#### **Anthrax**

Symptoms usually appear within seven days of contact and vary depending on how the disease was contracted. Cutaneous infections occur when the bacterium enters a cut or abrasion of the skin. Skin infection begins as a raised itchy bump that resembles an insect bite but within one to two days develops into a vesicle and then a painless ulcer, usually 1 cm to 3 cm in diameter, with a characteristic black necrotic (dying) area in the center. Lymph glands in the adjacent area may swell. About 20% of untreated cases of cutaneous anthrax will result in death. Deaths are rare with appropriate antimicrobial therapy.

Inhalation: Initial symptoms may resemble a common cold. After several days, the symptoms may progress to severe breathing problems and shock. Inhalation anthrax usually results in death in one to two days after onset of the acute symptoms.

Intestinal: The intestinal disease form of anthrax may follow the consumption of contaminated meat and is characterized by an acute inflammation of the intestinal tract. Initial signs of nausea, loss of appetite, vomiting, and fever are followed by abdominal pain, vomiting of blood, and severe diarrhea. Intestinal anthrax results in death in 25-60% of cases.

**Botulism**

Classic symptoms include double vision, blurred vision, drooping eyelids, slurred speech, difficulty swallowing, dry mouth, and muscle weakness. Infants with botulism appear lethargic, feed poorly, are constipated, and have a weak cry and poor muscle tone. The symptoms are related to muscle paralysis caused by the bacterial toxin. If untreated, these symptoms may progress to cause paralysis of the arms, legs, trunk, and respiratory muscles. In foodborne botulism, symptoms generally begin 18-36 hours after eating contaminated food, but they can occur as early as six hours or as late as 10 days.

**Plague**

Symptoms include a very swollen and tender lymph gland, fever, chills, headache, and extreme exhaustion. The pneumonic form involves a severe respiratory illness including high fever, chills, cough, breathing difficulty, and possibly bloody sputum. Naturally occurring plague is linked to rodents, rabbits, and fleas. If plague patients are not given specific antibiotic therapy, the disease can progress rapidly to death. About 14% (one in seven) of all plague cases in the United States are fatal.

**Smallpox**

Initially, symptoms resemble other viral illnesses, such as influenza, with fever and myalgia for two to four days. Skin lesions appear and quickly progress into a disfiguring pustular rash. The rash is most prominent on the face and extremities and scabs over in one to two weeks. Smallpox can be transmitted from respiratory droplets or from contact with skin lesions or secretions, with an average incubation period of 12 days. It is highly contagious and can lead to death in more than 30% of victims.

**CORRECTIVE ACTIONS:****Anthrax**

If doused with Anthrax, person is to be washed off by staff wearing complete barriers. Soap and water utilized may be discarded down normal drain. Clothing is to be placed in a sealed bag with the person's name imprinted.

Person was not doused but exposed to Anthrax-cardio-pulmonary support as indicated is to be initiated, antibiotics: i.e. Cipro, Levofloxacin, Doxycycline should be made readily available.

**Smallpox**

All staff are to wear appropriate barriers which will include an N-95 duck bill mask, impervious gown, gloves, and eye shield.

No decontamination is required for this disease entity.

Patients are to be placed into a negative pressure room as soon as possible.

CDC is to be notified immediately in order to provide vaccine and Vaccinia immune-globulin.

Close off the ventilation of all air dispersed from the exposed area to the corridors outside.

All persons in the exposed area are considered exposed and must be quarantined.

**Botulism (AEROSOLIZED OR INGESTED)**

Not transmitted from person to person. Isolation is not required.

Suffolk County DOH notified, CDC contacted for guidance and possible antitoxin

**NOTE:** These are just a few of the many agents a bioterrorist is capable of using. If any of the above or other diseases are suspected or noted, the person/persons are immediately isolated and the above internal and external contacts are employed. The person/persons will then be immediately transported to the nearest hospital when feasible.

The only official copy of this file is the one online at the Medical Department website under "Clinical Research Center Policy Manual." Before using a printed copy, verify that it is the most current version by checking the document effective date on the website.